

Scrutiny comments of mining part in respect of Hadmatiya Bxt mine, M.L./Sy.No.-121 over an area of 25.1412Ha, non-forest land, A-others category mine, situated in Hadmatiya-village of Kalyanpur-Taluka, Devbhumi Dwarka-Distt. of Gujarat-State for approval of Review of mining Plan under rule 17(2) of MCR,2016 for five year block period 2015-16 to 2019-20 & approval period 2017-18 to 2019-20 of M/s Kanaiya Industries.

Cover Page- The title of document should be corrected as “Review of Mining Plan” instead of mining plan. The expiry of lease period should be 18/5/2030 as per MMDR amendment Act 2015 & five year block period should be 2015-16 to 2019-20 and approval period 2017-18 to 2019-20 should be given.

Certificate/Undertaking-The DGPS coordinates of lease boundary pillars as per lease plan duly authenticated by state Govt. should be given in further submission.

General-It was observed during inspection that survey of lease area was not updated with no of benches in top soil & bauxite & no latitude & longitude of boundary pillars were available/erected as per statutes in field. The mine workings done with in 7.5m of statutory barrier of adjacent lease or outside the mine lease area should be discussed & justified with supporting documents. Copy of common boundary working permission under rule 111 of MMR 1961, if any should be enclosed in further submission. The GPS coordinates of lease boundary pillars is no more allowed. It should be submitted the DGPS coordinates of boundary pillar as per CCOM circulars 02/2010.(Page-4)

Introduction- The brief history of mine should be discussed from first grant of mining lease, and approval of MP/SOM/Modification with period of approval, non-working in past, verification of stocks by CGM reports etc should be discussed with supporting documents. The copy of Environment Clearance /Consent to Air & Water etc should be discussed & submitted.

Location & Accessibility: - Page-2, Name, address and contact details of others partners of firm should be given in tabular form. The type of land & ownership details of lease area should be given based on Govt. revenue record in tabular form. The surface rights of land used for the plan period is presently held with lessee or not, is not discussed.

Details of approved mining plan/scheme of mining-i) The ROM production, OB/Development, exploration, plantation done etc. should be discussed with location, top & bottom RL, area/tonnage & grade etc. The NIL production reported for the year 2014-15 & 2015-16 should be discussed with valid reason with supporting documents. The year of exploration, location & depth of trial pits, agency etc. should be discussed. It should be discussed in remark column whether any existence of mineral is present below trial pits. The remaining mine lease area should be explored as per provision of MCDR, 2017/ministry of mines guidelines up to depth of mineralised as per GSI/State Govt. Record. The status of submission of online periodical returns with IBM & existence of mineral stacks available in field should be discussed & justified. Reason for not carrying out backfilling is to be given.

The copies of violations, SCN issued by IBM,/MMS Nagpur & their reply should be properly discussed with supporting documents. The year wise production & development quantity achieved should be given based on statutory annual/monthly returns submitted to IBM & deviation should be justified.

The feasibility report should be discussed with latest economic parameters, IRR, viability of project etc. in conclusion.

Geology-The reserves & resources should be re-estimated as per provisions of Mineral (Evidence of mineral content) rules 2015. Adequate number of exploratory pits/holes in mineralised area to be made. More over a proposal should also given for ascertaining the mineral continuing below lithomeric horizon. The cut-off grade & threshold value of bauxite mineral should be discussed as

per IBM circular 2009. {Bauxite-Al₂O₃ - 30 % (Min) and silica (reactive) 5% (Max)& for aluminous laterite: Al₂O₃, 20 % (Min)}. The above threshold & below cut off grade should be consider as mineral rejects. The presence of silica content in bauxite more than 5% should be considered as waste.

Grade wise as from user's specification, mineral reserves of bauxite is to be segregated. The term OB on geological section is not clear. Give its geological terminology. The reserves and resources should be given & updated as on 01.4.2017 or till date, after depletion of production achieved. The reserves & resources should be modified by leaving the mineral blocked in statutory barriers etc.

Mining: - The existing pit dimension along with no of benches, top & bottom RL etc., in tabular form should be given as on 01.4.2017 or till date. The year of production proposals should be modified from 2017-18 to 2019-20 & proposed area should be in modified G1/G2 level of exploration only. It needs modification.

The proposed production & development quantity should be given pit wise & in tonnes also as per manual of appraisal of mining plan 2014. The above threshold value & below cut-off grade should be given as mineral rejects. The 100% recovery of ore is impossible. It needs correction & modification in table.

It was observed during inspection that mining operation done unsystematically & so many ROM/mineral rejects stacks developed & formed in lease area & it seem to be more than production quantity as reported in returns. It needs clarification with valid reason. The quantity of actual mineral stacks available in mine & closing stock shown in returns should be discussed & justified with supporting documents. The mine workings done outside the lease area, as illegal mining should be discussed & justified with valid reason.

The adequacy of man & machinery & their capacity should be discussed & justified. It should be clarified whether HEMM proposed/used is own/hired/contract etc. with supporting documents.

The mining proposal in present plan period & conceptual period should be discussed properly as shown in plan & sections. The land used details should be discussed as on 01.4.2017 & plan period up to 31.3.2020 & up to lease period/conceptual period. Pare-7.0, the quantity of mineral rejects generation & their utilisation should be discussed properly. It was observed during inspection that large quantity of mineral rejects/low grade stacked in lease area, it should be shown properly with grade of stacks etc.

Page-32, 34 PMCP: - Land use pattern should be mentioned as on date or 01.4.2017 and plan period up to 31.3.2020 and lease period. The existing as well as proposed environmental protective measures should also be given in tabular form with latest analysis results.

Page-43, financial assurance: Land use pattern should be mentioned as on 01.4.2017 and plan period up to 31.3.2020. The copy of original valid bank guarantee of extended period for the A-category mine should be submitted in further submission in the form of Annexure. All plan and section, text & tables should be modified based on above scrutiny.

During the pendency of approval, if there is any change in the name / address / ownership of mining lease, it should be informed promptly. All plan and section, text & tables should be modified based on above scrutiny.

All plan and section, text & tables should be modified based on above scrutiny & deficiencies should be rectified as discussed during inspection.

1. **Lease Plan:** It should be translated in English & DGPS coordinates of boundary pillar with numbers, latitude; longitude duly authenticated by CGM should be enclosed.
2. **Key Plan:** Lease area should be bounded by all sides showing latitudes and longitudes of extreme boundary points. Land use status i.e. Govt. land, private land & forest land, wind rose diagram etc must be shown by different colour code.
3. **DGPS plan:** It should be mentioned about the path row of the satellite and date of pass of DGPS survey. The soft copy of full set of auto generated files of super imposed output or text file etc. should be enclosed in further submission.
4. **Surface Plan:** The boundary pillar number with latitude, longitude as per state CGM, water nallah, pit benches, mineral stacks i.e. ROM, OB, Mineral rejects etc. should be shown. The statutory barrier of 7.5m, electric power line, public road, nallah etc. should be shown & leaving barrier as per provision of MCR, 2016. The surface plan should be signed & certified by mine surveyor/mine manager with date & place.
5. **Surface Geological Plan & sections:** The existing/proposed exploratory core boreholes, mine pits with G1,G2,G3 level of exploration as per MEMC Rule,2015 should be judicially shown. All sections should show contact with host rock at bottom or maximum possible mineral thickness based on GSI/DMG data.
6. **Production & Development plan& sections:** The plan & section should be updated & modified year wise instead of composite plan. The year wise proposal should be shown properly with benches, top & bottom RL & area etc. The protective measures, approach roads to working pits etc. should be proposed & shown properly. The year wise proposal should be modified pit wise in G1&G2 level of exploration as per MEMC Rule,2015 only. The area & location of waste dumping should be shown correctly. The conceptual plan should be updated & showing five year block up to life of mine.
7. **Conceptual Plan:** The pit position of mine at conceptual stage of tentative mining should be shown in conceptual plan with showing plan & block period of mining with levels as given in existing & proposed land used details.
8. **Reclamation Plan-**Existing & proposed afforestation is not shown properly in plan. Garland drain, retaining wall, rain water management and mine water discharge system is not shown in this plan.
9. **Environment Plan:** The plate is not prepared as per rule 28(5)(b) of MCDR 88 to show other details population, village boundary, types of land& features in 60m & 500 area etc.
10. **Financial Assurance Area Plan-**The break-up of mine land area in plan should be given in table & text. Land use pattern should be mentioned as on 01.4.2017 and subsequent plan period up to 31.3.2020.Plan & sections:
Annexure:
 1. All supporting documents of mining plan & subsequent scheme of mining, modification approval letters, state DMG letter for deemed extension of mining lease as per MMDR Act,2015, DGPS coordinates of lease boundary pillars duly authenticated by CGM, State Govt as per CCOM circulars 02/2010 should be submitted in further submission. The other annexure/copy in Gujarati should be translated in either English or Hindi should be enclosed.

2. The copy of resolution of board of directors & nominated owner/signing authority should be submitted in further submission.
3. The copy of field photographs of trail pits/core boreholes, form K & L, borehole logs etc. with sign of geologist should be given in further submission.
4. The latest chemical analysis report of ore/mineral rejects etc. should be submitted from an NABL accredited Laboratory.
5. All Geological reserves/ Blockable reserves calculation & Year-wise production & development calculation tables should be annexed with relevant chapter / text of document.
6. Field photographs of present mine workings, corner boundary pillars with number, RL, latitude and longitude marked on it etc. should be submitted.
7. Latest quarterly monitoring report on air, water & noise should be enclosed as per category of the mine for last 2-3 quarters.
8. The copy of original valid BG of extended period should be submitted in the form of annexure.
